UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/043,143	01/14/2002	Gang Huang	HUANG 14-13-7	6844

7590   01/18/2008

MANELLI DENISON & SELTER PLLC
7th Floor
2000 M Street, N.W.
Washington, DC 20036-3307

EXAMINER
STRANGE, AARON N

ART UNIT	PAPER NUMBER
2153	

MAIL DATE	DELIVERY MODE
01/18/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Office Action Summary	10/043,143	HUANG ET AL.
	Examiner	Art Unit	
	Aaron Strange	2153	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>31 October 2007</u>.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>7,8,15,16,23 and 24</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>7,8,15,16,23 and 24</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

1.   The Examiner would like to note that the present application has been

reassigned to a new Examiner.

Response to Arguments

2.   Applicant's arguments filed 10/31/07 have been fully considered but they are not

persuasive.

3.   With regard to claim 7, and Applicant's assertion that "Feuser does not disclose

or suggest issuing network pause commands *to prevent interference from other nodes*

during the adjustment of a network node" (emphasis added)(Remarks, 5-6), it is noted

that such a limitation does not appear in the rejected claims. The claims fail to state the

purpose of issuing a network lock command, and even if they did, it would merely be an

intended use recitation. As discussed in the Office action of 7/27/2007, and as admitted

by Applicant (Remarks, 5), Feuser discloses issuing network pause (lock) commands,

that cease particular nodes from communicating on the network. One of ordinary skill in

the art would have recognized that these commands could be used to stop nodes from

communicating for any reason, and would have had a reasonable expectation of

success in using them. Using pause commands, as taught by Feuser would have

advantageously allowed a user of Sweitzer's calibration system to stop other nodes

from transmitting during the calibration procedure, eliminating any undesired effect

unwanted transmissions would have on the calibration results.

4.   With further regard to claim 7, and Applicant's assertion that "Ang's invention is

unrelated to optimizing the transfer of data between nodes", instead being

"receiver/transmitter centric" (Remarks, 8), the Examiner respectfully disagrees. Ang

discloses that the optimization process is for ensuring that a transceiver is "capable of

reliably recovering data from a received network signal" (col. 2, ll. 11-13). This is clearly

related to optimizing the transfer of data between nodes. Furthermore, it is noted that

the current claims contain no limitations precluding a "receiver/transmitter centric"

system, since the claims only require that the second node transceiver is adjusted

based on various criteria. Nothing in the claim precludes these criteria from being

"receiver/transmitter centric" centric, so long as they have an effect on the transfer

between nodes.

Claim Rejections - 35 USC § 103

5.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

6.   Claims 7-8, 15-16, and 23-24 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Sweitzer et al. (U.S. Patent Number 6,570,915; hereinafter Sweitzer)

and Feuser et al. (On the Effects of IEEE 802.3x Flow Control in Full-Duplex Ethernet

LANs, 1999; hereinafter Feuser).

7.   Regarding claims 7-8, 15-16, and 23-24, Sweitzer disclosed a self calibrating

network comprising: a first node (e.g. DTU-C or DTU-R) to transmit a test signal (probe

signal); and a second node (e.g. DTU-C or DTU-R) to receive said test signal and to

adjust a second node transceiver to optimize the transfer of data between said first

node to said second node, said adjustment of said second node transceiver being

based on at least one of available criteria comprising a noise measurement value

("signal-to-noise ratio"), a propagation delay value, and a bit rate error value ("bit-error-

rate") (Col 3, lines 17-40).

Sweitzer failed to specifically recite issuing a from the first or second nodes a

network lock command during the adjustment of the second node transciever, ceasing

nodes other than said first node or said second node from communicating on the

network.

In a similar networking system, Feuser discloses issuing network lock commands

(e.g. XON and XOFF pause commands) to certain nodes on the network (see inter alia

Feuser pg 1 section 1) to prevent them from communicating on the network. One of

ordinary skill in the art would have recognized that these commands could be used to

stop nodes from communicating for any reason, and would have had a reasonable

expectation of success in using them. Using pause commands, as taught by Feuser

would have advantageously allowed a user of Sweitzer's calibration system to stop

other nodes from transmitting during the calibration procedure, eliminating any

undesired effect unwanted transmissions would have on the calibration results.

Therefore, it would have been obvious to one of ordinary skill in the art at the

time of Applicant's invention to incorporate Feuser's network lock command functionality

in the nodes of Sweitzer's network in order to prevent other nodes from communicating

during the calibration process, potentially interfering with the test results.

8.   Claims 7-8, 15-16, and 23-24 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Schober et al. (U.S. Patent Number 6,493,320; hereinafter Schober)

and Ang (U.S. Patent Number 6,424,630) and Feuser et al. (On the Effects of IEEE

802.3x Flow Control in Full-Duplex Ethernet LANs, 1999; hereinafter Feuser).

9.   Regarding claims 1 and 9, Schober discloses a self calibrating network

comprising: a first node (for example Figure 1, Routers 105a or 105b between link

110a) to transmit a test signal (any packet sent while tuning; e.g. a test pattern); and a

second node (for example Figure 1, Routers 105a or 105b) to receive said test signal

and to adjust (Figure 7, Component 600) a a second node transceiver to optimize the

transfer of data (frequency, power level) between said first node to said second node

(reliable transfer at the fastest possible speed and lowest possible power level, Col 2

lines 32-42), said adjustment of said second node transceiver being based on least one

of available criteria (e.g. timing of signal transitions Col 2, lines 66-67).   B

However Schober failed to specifically recite said adjustment of said second

node transceiver being based on a noise measurement value.

In analogous network optimization system, Ang disclosed optimizing network

transceivers based on a noise measurement value of a test signal (comparison signal)

in order to provide an optimum configuration for processing network signals (Col 2, lines

46-64). Ang further disclosed that such an optimization scheme minimizes errors due to

process variations during manufacturing (Col 2, lines 14-17). Thus, it would have been

obvious to one of ordinary skill in the art at the time of Applicant's invention to optimize

network transceivers based on a noise measurement within the Schober's system, in

order to minimize errors due to process variations during manufacturing and thus

provide a more reliable system (Ang Col 2, lines 14-17).

Schober also failed to specifically recite issuing a from the first or second nodes

a network lock command during the adjustment of the second node transciever, ceasing

nodes other than said first node or said second node from communicating on the

network. Nonetheless it was widely known in the art at the time of Applicant's invention

to issue such network lock commands from particular nodes on the network to other

nodes on the network, as evidenced by at least Feuser. In a similar networking system

Feuser disclosed issuing network lock commands (e.g. XON and XOFF pause

commands) to certain nodes on the network (see inter alia Feuser pg 1 section 1).

In a similar networking system, Feuser discloses issuing network lock commands

(e.g. XON and XOFF pause commands) to certain nodes on the network (see inter alia

Feuser pg 1 section 1) to prevent them from communicating on the network. One of

ordinary skill in the art would have recognized that these commands could be used to

stop nodes from communicating for any reason, and would have had a reasonable

expectation of success in using them. Using pause commands, as taught by Feuser

would have advantageously allowed a user of Sweitzer's calibration system to stop

other nodes from transmitting during the calibration procedure, eliminating any

undesired effect unwanted transmissions would have on the calibration results.

Therefore, it would have been obvious to one of ordinary skill in the art at the

time of Applicant's invention to incorporate Feuser's network lock command functionality

in the nodes of Sweitzer's network in order to prevent other nodes from communicating

during the calibration process, potentially interfering with the test results.

Conclusion

10.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the mailing date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aaron Strange whose telephone number is 571-272-3959. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glen Burgess can be reached on 571-272-3949. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AS
1/14/08

THU HA NGUYEN
PRIMARY EXAMINER